## CREST Status Report - November 6, 2002

## **David Oppenheimer - USGS**

## Activity: <u>Consolidated Reporting of EarthquakeS</u> and <u>Tsunamis</u> (CREST)

- 1) **Warning Centers:** During the past year there was no work performed at the Warning Centers by CREST project personnel, except for support of telemetry links.
- 2) **Seismic Network instrumentation**: There are now X of the 56 CREST stations installed. Most activities were related to station maintenance and support.

AEIC: Report to be given by Roger Hansen

ATWC: The broadband sensor failed at Sand Point and was replaced. The satellite hardware at Sand Point was recalled by the manufacturer and was replaced.

NCSN: 9 of the 11 stations are operational. Satellite and sensor equipment was purchased to complete the remaining two sites in the FY2002 field season. Satellite equipment arrived in June, and subsequent testing of the equipment at field sites revealed problems with the equipment. The manufacturer was notified, and testing by the manufacturer reproduced the problem. Consequently, all of the satellite telemetry and datalogger hardware scheduled for installation this year was returned to the manufacturer and installation must be deferred until Spring of FY2003 when snow has melted and vehicles can again drive to the two remote sites.

HVO: Hawaii remains fully operational.

PNSN/UO: 19 of the 20 CREST sites but have been installed by the PNSN. Three sites were installed this year – 1) Forks, WA which should be operational shortly, 2) east of Portland, Oregon at Hood Meadows which is operational, and 3) in southwest Washington (Baw Faw) which should be operational before the end of the year now that telemetry issues have been resolved.

UCB: The other northern California site at Alder Springs (GAS) is in the final stages of permitting and installation is expected Spring, 2003.

- 3) **Communications**: All links are up and functional. In November the entire CREST network transitioned from AT&T to MCIW, who holds the FTS contract, and the link from Golden to Palmer was increased to 128Kbps.
- 4) **Algorithms**: ShakeMap software is functional in California, Oregon, and Washington. We expect software to be operational in HVO and Alaska this year. Automated moment tensor code is functional in California and undergoing testing in Alaska. NEIC now reports automated moment tensor results to the Warning Centers. California is developing statewide, robust operations such that Pasadena can report on northern California quakes. ML magnitude computation is in operation in California, Washington, and Alaska.